spectrum is fairly well known from Pajarito measurements on air-tamped assemblies for different U235 concentrations (TMG M-27, Section 3).

DUE (3)

2.8 Upshot;

= 6(3)

(n-2n) detectors to detect 14 mev neutrons from DT pellets might be placed to obtain the compression of the LiH. (See also TMG M-33, Section 9.)

## 3. Neutron Flux and Spectrum

Ogle would like to see calculations of these to aid in estimating gamma ray signals in DINEX experiments. There was some discussion of chances to make a TENEX experiment. This depends possibly on the spread of the energy of the 14 mev neutrons due to scattering on light elements in H.E. If this spread is too large, TENEX does not seem to be useful.

## 4. Growth of Ball of Fire

C. Mark reported a suggestion of B. Watt to undertake radiation hydrodynamic calculations for some bombs covering the stage of the growth of the ball of fire to about 10 m during which it is dim and following it the stage of brightness lasting 10 to 30 usec.

5. Upshot Calculations

5.1 /

7-T

Fig. I is a tentative drawing made from Broyles' numbers. Calculations such as radiation flow and implosion will be made on the basis of this design.

UNCLASSIFIED

UNCLASSIFIED

UNCLASSIFIED

D6E 503